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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/682,419 | 10/10/2003 | Kenji Kawano | 04329.3161 | 3440 |

22852 7590 04/19/2005

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
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EXAMINER

FUQUA, SHAWNTINA T

| | |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3742

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/682,419 | KAWANO ET AL. | |
| | Examiner | Art Unit | |
| | Shawntina T. Fuqua | 3742 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 1-25 and 40-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/10/03, 9/23/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 26-39 in the reply filed on 1/6/05 is acknowledged.
2. Claims 1-25, and 40-52 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/6/05.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 26-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoo (US6376806) in view of Guardado et al (US6222990).

Yoo discloses a heating apparatus comprising a holding means (106), a heating section (216, 202, 302) for selectively heating a partial range of substrate (Figures 2A, 2C), moving means (column 5, lines 14-17) to move heating section in parallel to main surface of substrate (Figures 2A, 2C), a gas supply (34, column 4, lines 33-35), determining processing conditions and controlling heating to uniformly heat substrate (column 2, lines 10-12; column 6, line 31-column 7, line 19), heater via radiation from a lamp, laser (column 6, lines 31-50; column 5, line 65-column 6, line 64; column 7, lines 20-24), optical fiber connecting light source and heating section and guiding light from light source to heating section (column 6, lines 31-50), and light

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source contains a wavelength equivalent to infrared ray range (column 6, lines 5-16). While Yoo discloses determining processing conditions and controlling heating, Yoo does not disclose the specific elements which are used to perform these functions such as a temperature measurement means, a detection means to detect intensity of light, a processing condition determining means to determine process conditions of the heater based on detection result, control means to determine substrate temperature, forming a stream between heater and substrate via gas supply and outlet, stream forming means controls speed of gas and temperature based on processing conditions, and a developer supply section on the backside and movable relative to the substrate. Guardado et al a temperature measurement means (28, 42), a detection means to detect intensity of light (28, column 6, lines 8-22), a processing condition determining means to determine process conditions of the heater based on detection result (column 9, lines 4-55), control means (40, column 9, lines 26-38) to determine substrate temperature, forming a stream between heater and substrate via gas supply (18) and outlet (20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the temperature measurement means, radiation detection means, process conditions determining means, control means, gas supply and outlet of Guardado et al in the apparatus of Yoo because, a temperature measurement means, radiation detection means, process conditions determining means, control means, gas supply and outlet allows the substrate to be heated more uniformly and the temperature to be controlled more accurately.

Yoo in view of Guardado et al discloses all of the recited subject matter except controlling either the speed or temperature of the gas and a moveable developer on the back of the substrate. Controlling either the speed or temperature of the gas and a moveable developer

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on the back of the substrate is conventional and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included controlling either the speed or temperature of the gas and a moveable developer on the back of the substrate as a means to deposit a film on the substrate.


Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawntina T. Fuqua whose telephone number is (703) 305-2581. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shawntina Fuqua can be reached on (703) 308-1327. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

stf
April 12, 2005


Shawntina Fuqua
Patent Examiner
Art Unit 3742